

NONFICTION

2

FUTURE LITERACY

READING

100

NONFICTION



FUTURE LITERACY

READING



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114

SCOPE AND SEQUENCE

SUBJECT	UNIT	TITLE	VOCABULARY
SCIENCE	1	Robot Firefighters	fire, brave, battle, fit, joystick, meter
	2	Cleaning Up Space Garbage	waste, ton, spaceship, clean up, solution, powerful
	3	Cars That Drive Themselves	type, vehicle, prevent, distance, crash, trust
	4	Intelligent Machines	enemy, solve, intelligent, chess, beat, champion
LANGUAGE ARTS	5	Baseball Signs	baseball, notice, variety, glove, pitcher, communicate
	6	Hieroglyphics	ancient, complicated, discover, expert, dictionary, translate
	7	How Animals Communicate	unique, chemical, path, vibrate, smack, produce
	8	Barcodes and QR Codes	airline, luggage, ticket, stripe, scan, item
MUSIC	9	The Theremin	electronic, wooden, antenna, wave, current, spooky
	10	Beat Machines	recording, cymbal, drummer, mistake, always, perfect
	11	Auto-Tune	attention, tune, software, natural, nearly, tone
	12	The Changing Shape of Music	concert hall, disc, heavy, cassette, pocket, stream
MATH	13	Weighing a Planet	weight, planet, moon, orbit, gravity, pull
	14	The First Scales	trade, value, worth, merchant, weigh, equal
	15	Catching Rain	flood, wipe out, speed, drop, times, defend
	16	Weather Models	blizzard, predict, information, moisture, model, forecast

- V** Vocabulary
- W** Writing
- B** Background Knowledge
- D** Digital Reading

KEY PATTERN	LITERACY UPGRADE
In the future, we'll have robots to protect us.	V Graphic Organizer, Unlocking the Secret Message
It is called space debris.	W It's time to <u>clean it up</u> . / Then they can <u>bring it back</u> to Earth.
Companies are making a new type of car.	B AI
The first intelligent robot was built in the 1970s.	D Conversation with a Chatbot
The pitcher and the other players stand far apart .	V Graphic Organizer, Baseball
This stone had the same text written in hieroglyphics and Greek.	W Most languages <u>are written</u> in one direction.
Human language seems unique .	B Sign Language
A barcode looks like black stripes.	D Website Instructions
The way that you play the theremin is also strange.	V Graphic Organizer, Definitions
They never get tired .	W Drum machines are <u>better</u> than human drummers in some ways.
But fixing it used to take a long time.	B Types of Music
But these machines were too heavy to take around easily.	D App Review
They need to know the distance between the planet and the moon.	V Graphic Organizer, Choosing Correct Words, Filling in the Blanks
For example , one cow was worth three goats.	W Stones were added <u>until</u> the two plates were equal.
Scientists can tell how much rain is falling per hour .	B Drought
They keep an eye on how the air moves.	D Weather Forecast Script

HOW TO USE THIS BOOK

STUDENT BOOK

VOCABULARY PREVIEW

Every four units, a list of key words is given along with a QR code to practice the words in the exciting Word Kingdom game.



ACADEMIC OBJECTIVES

This section states what students will learn in the four thematically integrated units.


READ AND THINK

These preview questions help draw the students' focus to the subject of the units.

AUDIO QR

A QR code at the beginning of each unit links to the audio tracks of the Vocabulary Zone and Reading section.

1 Robot Firefighters



WARM UP
 In the future, robots will do many jobs that are difficult, dangerous, or dirty.
Answer the questions.
 ■ Can you think of any dangerous jobs?
 ■ Could a robot do those jobs? Why or why not?

VOCABULARY ZONE

A Write the correct words and listen.

	fire	brave	battle	fit	joystick	meter
1.						
2.						
3.						
4.						
5.						
6.						

B Match the words to the meanings.

1. fit	•	• a basic unit of length equal to one hundred centimeters
2. joystick	•	• the control stick for an airplane, computer, or game
3. meter	•	• to be the right shape and size

C Fill in the blanks with the words from the box.

brave	battle	fire
-------	--------	------

- She was _____ during the thunderstorm and didn't cry.
- The two teams will _____ for the trophy.
- The _____ burned brightly in the fireplace.

WARM UP

Level-appropriate questions help students activate their background knowledge and think about the unit topic.

VOCABULARY ZONE

Students learn the unit key words and then perform matching and fill-in-the-blank activities to help strengthen memory retention and ensure they understand not only the words' meanings but also their usage in context.

VIDEO LINK

Videos related to the main passage are available to boost students' understanding. Click the icon in the eBook to view the videos.

KEY PATTERN

Students practice the Key Pattern from the reading passage with other example sentences.

A Listen and read out loud.

Fighting **fires** is a dangerous and dirty job. **Brave** people **battle** fires every day. In the future, we'll have robots to **protect** us.

There are different firefighting robots. One is small and can **fit** through doors. It's quick. A human controls it with a **joystick**. Another is much bigger. It sprays water 90 **meters** and fights huge fires. One firefighting robot even has hands and a face. It walks and carries a hose.



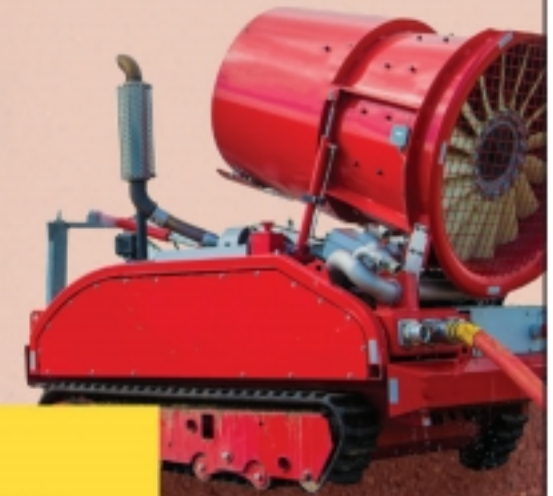
14

Scientists are now teaching it to talk. This is an exciting step forward. Soon firefighters will have lots of robot helpers.

KEY PATTERN

Practice the key pattern.

- ✓ **In the future**, we'll have robots to protect us.
- In the future**, people might live on other planets.
- In the future**, we could have new kinds of food.



B Write your own sentence with the key pattern.

C Follow the directions.

1. What are the different kinds of robots mentioned in the text? Underline the sentence(s) in the reading.
2. Who will have robots to help them in their job? Circle the word(s) in the reading.

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READING A

Students read a level-appropriate passage about a familiar and interesting topic using the key words.

READING B

Students review the Key Pattern of the reading and practice writing a sentence with the Key Pattern.

READING C

Students complete a quick comprehension check to confirm their understanding of the passage's details while it is fresh in their minds. This will prepare them for the following comprehension questions.

LITERACY TRAINING

A Read and choose the correct answers.

MAIN IDEA 1. What is the reading mainly about?

- Ⓐ reasons why humans are better firefighters than robots
- Ⓑ how robots will fight fires in the future
- Ⓒ reasons why firefighting is a difficult job
- Ⓓ the process of training firefighters

VOCABULARY 2. Which word or phrase is similar to **protect**?

- Ⓐ keep safe
- Ⓑ talk to
- Ⓒ control
- Ⓓ throw away

DETAILS 3. One kind of robot is controlled with a _____.

- Ⓐ joystick
- Ⓑ hose
- Ⓒ helper
- Ⓓ step

INFERENCE 4. In the future, what will firefighters have more of?

- Ⓐ flying cars
- Ⓑ robot helpers
- Ⓒ simple joysticks
- Ⓓ long hoses

B Read and write the sentence number(s) of the true sentence(s).

1. The big firefighting robot sprays water one meter.

2. One firefighting robot has hands.

3. Scientists are teaching the firefighting robot to dance.

C Read and fill in the blanks.

1. Fighting fires is a(n) _____ and dirty job.

2. The small firefighting robot can fit through _____.

LITERACY UPGRADE Vocabulary

A Complete the graphic organizer. One word is extra.

	firefighters	dangerous	robot	water	fire
What	Firefighters will have (1) _____ helpers in the near future.				
Who	Brave (2) _____ battle fires every day.		In the future, they will have robots to protect them.		Firefighting is a (3) _____ and dirty job.
How	• a small robot that fits through doors • a bigger robot that sprays (4) _____ very far • a robot with a face and hands that walks and carries a hose				

B Look at the pictures, fill in the boxes, and unlock the secret message.

1.

2.

3.

4.

5.

6.

1 2 3 4 5

6 7 N

8 9 G H

LITERACY TRAINING

Students complete a variety of reading comprehension questions and exercises. These exercises engage students by going beyond the main idea and asking about specific details of the reading. This helps form a solid foundation in reading literacy.

LITERACY UPGRADE

Students are introduced to a sequential cycle of interconnected modules: Vocabulary, Writing, Background Knowledge, and Digital Reading. Innovative videos in the Digital Reading section extend the learning experience beyond the traditional page.

WORKBOOK

VOCABULARY CHECK

Students review the key words and practice spelling them through puzzles.

COMPREHENSION CHECK

Students recall key information from the reading and practice what they have learned.

1 Robot Firefighters

VOCABULARY CHECK

Complete the puzzle and find the secret word.

fires brave battle fit joystick meters

Across →

3. Brave people _____ fires every day.

4. One robot can _____ through doors.

5. Firefighters are very _____.

Down ↓

1. A human controls the robot with a _____.

2. It sprays water 90 _____.

4. It can fight huge _____ with big sprays of water.

Secret word: _____

SENTENCE CHECK

Unscramble the sentences.

1. is a job Fighting fires dangerous and dirty

2. robots to we'll have In the future, protect us

3. walks One firefighting robot and carries a hose

COMPREHENSION CHECK

A Check the correct sentences.

1. One robot can carry a hose.
One robot can use a joystick.

2. One robot looks like a joystick.
One robot looks like a person.

3. Firefighters have an easy job.
Firefighters have a dangerous job.

B Circle T for true or F for false.

1. Firefighting is a safe and boring job. T F

2. One kind of robot can walk and carry things. T F

3. All robot firefighters can talk. T F

SUMMARY

Complete the summary.

brave dirty hands helpers meters protect

(1) _____ people battle fires every day. It's a dangerous and (2) _____ job. In the future, they'll have robots to (3) _____ them from fires. There are different firefighting robots. One sprays water 90 (4) _____ and fights huge fires. Another even has (5) _____ and a face. It can walk and carry a hose. It may even learn to talk. These robots will be great (6) _____ for firefighters.

SENTENCE CHECK

Students practice writing sentences by doing an unscrambling activity.

SUMMARY

Students check their understanding by completing a summary of the reading passage.

The Future Is Robotic



Academic Objectives

- Make predictions about the roles robots and technology will take in our lives.
- Recognize the possible pros and cons of technological advances.

Read and Think

- What do we use robots for now?
- What jobs do you think robots will do in the future?

Vocabulary Preview

1

battle
brave
fire
fit
joystick
meter

2

clean up
powerful
solution
spaceship
ton
waste

3

crash
distance
prevent
trust
type
vehicle

4

beat
champion
chess
enemy
intelligent
solve



Game

1 Robot Firefighters



AUDIO

WARM UP

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fire

brave

battle

fit

joystick

meter

1.



2.



3.



4.



5.



6.



B Match the words to the meanings.

1. fit

•

•

a basic unit of length equal to one hundred centimeters

2. joystick

•

•

the control stick for an airplane, computer, or game

3. meter

•

•

to be the right shape and size

C Fill in the blanks with the words from the box.

brave

battle

fire

1. She was _____ during the thunderstorm and didn't cry.

2. The two teams will _____ for the trophy.

3. The _____ burned brightly in the fireplace.

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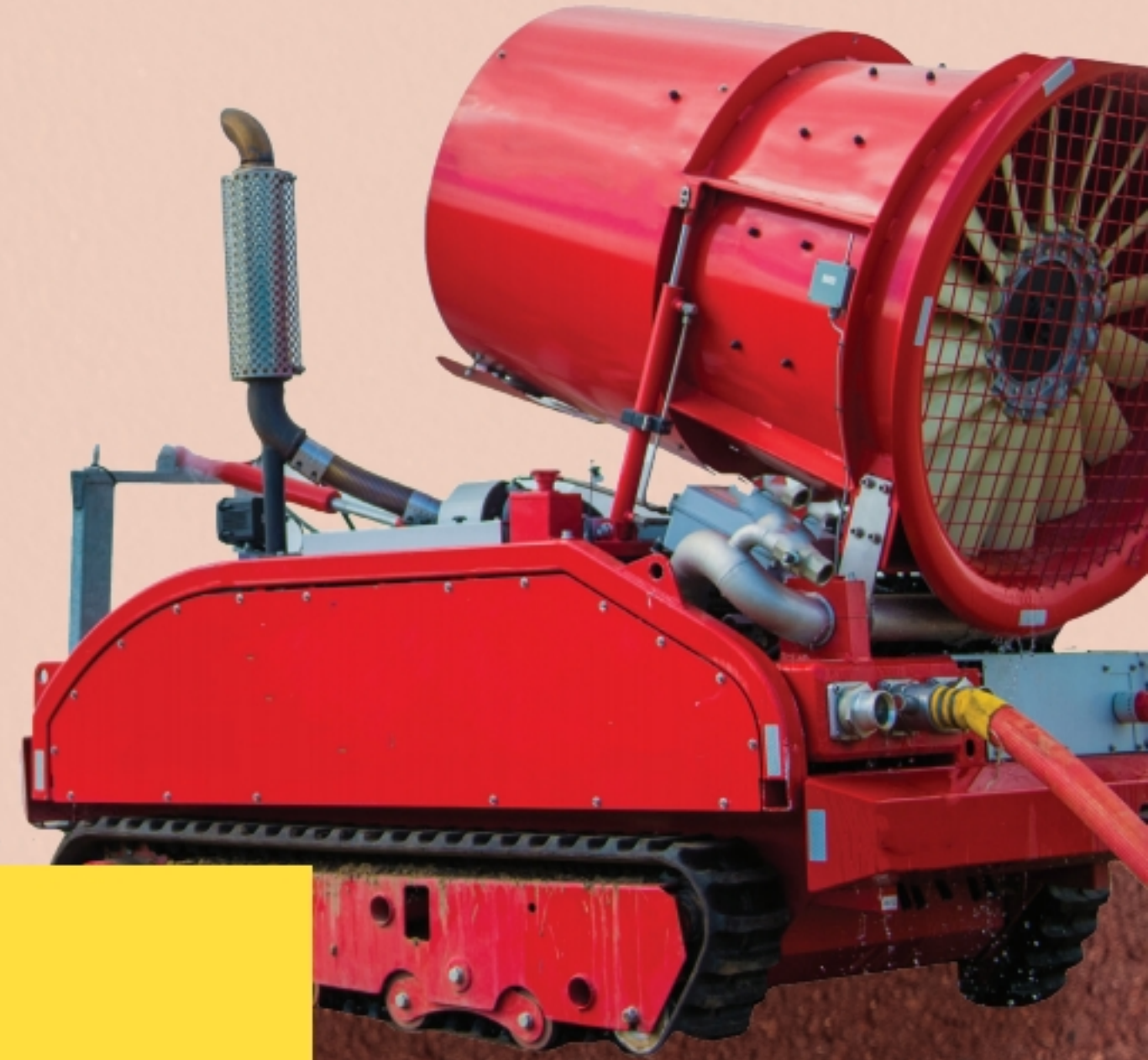


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