



READING FUTURE

DEVELOP

2

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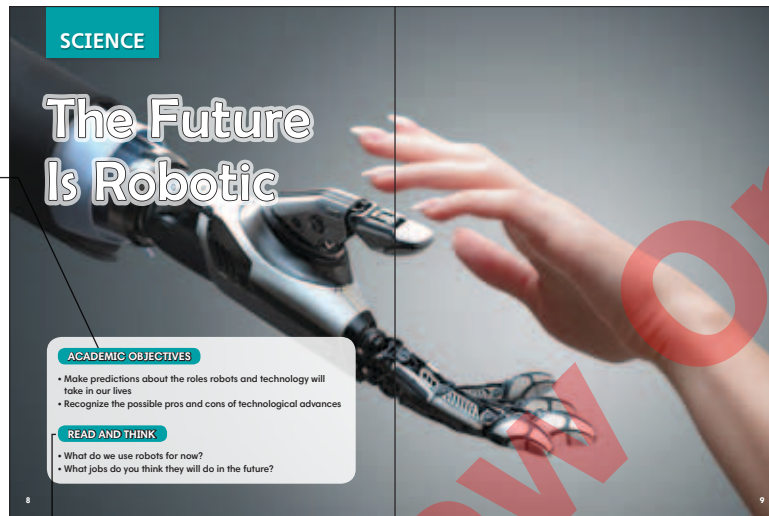
SCOPE & SEQUENCE

Subject	Unit	Title	Word Count	Reading Skill	Project
SCIENCE	1	Cleaning Up Space Garbage	84	Main Idea & Details	Invent a New Solution
	2	Robot Firefighters	86	Summarizing	Future Predictions
	3	Cars That Drive Themselves	90	Main Idea & Details	Program Your Trip
	4	Intelligent Machines	88	Sequencing	A New Kind of Friend
LANGUAGE ARTS	5	Hieroglyphics	93	Main Idea & Details	Writing in Hieroglyphics
	6	Baseball Signs	89	Summarizing	Hand Signs
	7	How Animals Communicate	87	Classifying	Animal Communication
	8	Barcodes and QR Codes	91	Compare & Contrast	A Secret Code
MUSIC	9	The Theremin	89	Main Idea & Details	Your Special Instrument
	10	Beat Machines	91	Compare & Contrast	Let's Write Stories!
	11	Auto-Tune	90	Sequencing	You're the Engineer!
	12	The Changing Shape of Music	91	Sequencing	Follow the Music
MATH	13	The First Scales	91	Main Idea & Details	Your Own Weighing System
	14	Weighing a Planet	86	Main Idea & Details	Research a Planet
	15	Catching Rain	92	Main Idea & Details	Your Own Rain Tool
	16	Weather Models	84	Activating Prior Knowledge	Weather Forecasting

Vocabulary						21 st Century Skills	
waste	spaceship	solution	invent	net	powerful	Creativity	Communication
fire	brave	battle	fit	joystick	meter	Critical Thinking	Collaboration
type	vehicle	prevent	crash	trust	driver	Critical Thinking	Communication
enemy	solve	intelligent	chess	beat	champion	Creativity	Communication
ancient	discover	text	expert	dictionary	translate	Creativity	Communication
notice	sign	pitcher	communicate	secret	glove	Creativity	Collaboration
unique	chemical	path	distance	smack	produce	Creativity	Communication
airline	luggage	ticket	stripe	scan	item	Creativity	Communication
wooden	antenna	touch	wave	current	spooky	Critical Thinking	Creativity
recording	cymbal	drummer	mistake	perfect	variety	Creativity	Communication
engineer	tune	software	natural	nearly	tone	Critical Thinking	
disk	cassette	pocket	convenient	file	stream	Critical Thinking	
trade	value	worth	merchant	weigh	equal	Critical Thinking	Creativity
scientist	weight	planet	moon	orbit	gravity	Critical Thinking	Communication
flood	measure	speed	drop	times	defend	Critical Thinking	Creativity
predict	information	moisture	complicated	model	forecast	Creativity	Communication

HOW TO USE THIS BOOK

Student Book



ACADEMIC OBJECTIVES

Academic Objectives introduce what students will learn in the four thematically integrated units.

READ AND THINK

This section previews questions to help draw students' focus.



WARM-UP

A level-appropriate introduction and questions with a captivating image help students activate their background knowledge and think about the topic.

NEW WORDS

Students learn the meanings of new vocabulary words through images.

READING

A variety of interesting non-fiction reading passages are presented. Target words are bolded and colored in the passage.

VIDEO LINK

Video links related to the main passage are available to boost students' understanding. To access them, click the icons in the eBook.

VOCABULARY SKILLS

This section helps students enhance their understanding of vocabulary from the reading.

READING SKILLS

This section provides a quick comprehension check and guides what reading skills to use for each passage.

READING COMPREHENSION
Choose the correct answer.

1. What is the reading mainly about?
a. The history and future of space travel
b. A problem in space and the solution
c. How to be healthy when living in space

2. Space debris is dangerous because it can hit and even Earth.
a. dangerously fast b. a net c. spaceships

3. What will scientists NOT use to find and catch the trash in space?
a. A giant net
b. A powerful camera
c. A very fast spaceship

READING SKILLS: Main Idea & Details
Complete the chart. One word is extra.

catch	leave	tonnes	space
-------	-------	--------	-------

Main Idea	Details
Trash is a big problem in 1. _____.	• There are 8,000 2. _____ of it up there. • Scientists hope to 3. _____ it with a huge net and bring it back to Earth.

READING COMPREHENSION

This section checks students' understanding of the passage with multiple-choice questions.

VOCABULARY REVIEW
Choose the correct word to complete each sentence.

spaceships invented powerful waste

- Scientists have _____ a giant net.
- Space debris can hit _____.
- Scientists will use _____ cameras to find the trash.
- Scientists will catch the _____ with the giant net.

21st CENTURY SKILLS Critical Thinking Creativity Collaboration Communication

PROJECT Invent a New Solution
You learned about one way to remove space debris. Now invent another one.
Step 1 Think about the design for your machine.

1. Name	My invention is called _____.
2. Description	It is _____ and _____ (big / small / fast / slow / powerful).
3. How it works	It can _____ space debris. (shoot / suck up / destroy / catch / eat)
4. Design image	Draw your machine.

Step 2 Show your design to the class. Decide who has the best solution.

READING SKILLS

A wide variety of graphic organizers give students practice with reading and vocabulary skills.

VOCABULARY REVIEW

In this section, students practice their vocabulary skills through circling and fill-in-the-blank activities.

PROJECT

The Project expands students' knowledge related to the topic. It helps students develop 21st century skills through fun and engaging project activities.

Workbook

1 Cleaning Up Space Garbage

VOCABULARY CHECK
Complete the puzzle and find the secret word.

spaceship net powerful invent solution waste

Across →

- They will use _____ cameras to find the trash.
- Scientists _____ new things like giant nets.

Down ↓

- One _____ is a giant net.
- Space debris can hit a _____.
- _____ is even a problem in space.
- They will catch the trash with a giant _____.

Secret word: _____

SENTENCE CHECK
Unscramble the sentences.

- have left in space People 8,000 tonnes of trash
- spaceships It can hit even Earth and
- cameras will use powerful Scientists

VOCABULARY CHECK

This section provides an opportunity to review the New Words and practice spelling them through a puzzle.

COMPREHENSION CHECK

A Check the correct sentence.

- Scientists have invented a giant net.
 Scientists have found a giant net.
- Space debris can hit spaceships.
 Space debris can catch spaceships.
- The net gives scientists a new problem.
 The net gives scientists a solution.

B Circle T for true or F for false.

- There are 8,000 tonnes of trash on Earth. T F
- Space debris can be dangerous. T F
- Scientists will use cameras and a net to solve the problem. T F

SUMMARY
Complete the summary.

invented net spaceships waste tonnes powerful

1. _____ is a big problem in space. There are 8,000 _____ of trash up there. This space debris goes around the Earth fast. It may hit _____ and even Earth.
Scientists have _____ a giant _____ to catch the trash. They will use _____ cameras to find the trash. They will catch it and bring it back to Earth.

COMPREHENSION CHECK

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

SUMMARY

Students learn how to summarize information from the passage and check their understanding by completing the summary.

SENTENCE CHECK

Students practice writing sentences by doing an unscrambling activity.



Scan and find the tracks.

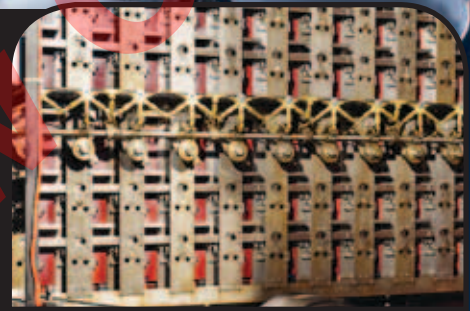
Intelligent Machines

WARM-UP

Computers and robots have changed a lot. Now we use them for many things, from sending emails to building cars. But how will we use computers and robots in the future?

Answer the question.

- Look at the picture. What is it? How old is it? What was it used for?



NEW WORDS



Write the correct word and listen.

enemy

solve

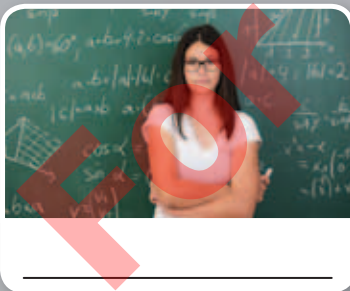
intelligent

chess

beat

champion

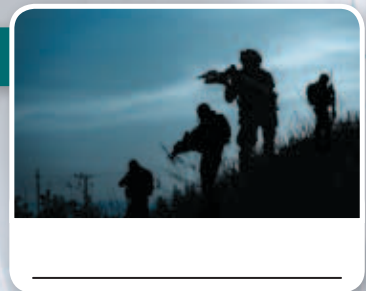
1



2



3



4



5



6



READING



Listen and read.



Do you have a robot friend?
In the future, you might.



Computers and robots have developed a lot. The first computers were created in the Second World War. They could understand **enemy** messages. By the 1950s, computers could **solve** difficult math problems. The first **intelligent** robot was built in the 1970s. Now computers play games like **chess** and Go. They can even **beat** human **champions**.

Many people think computers and robots will soon be more like us. They may soon think and talk. What will they talk about?

Reading Time: _____ m _____ s / 88 words

VOCABULARY SKILLS

1. Which word is similar to developed?
a. advanced
b. increased
c. decreased
2. What does created mean in the passage?
a. ended
b. invented
c. bought

READING SKILLS Sequencing

1. What could the first computers do? Underline the sentence(s) in the passage.
2. What do people think computers will soon be able to do? Circle the word(s) in the passage.

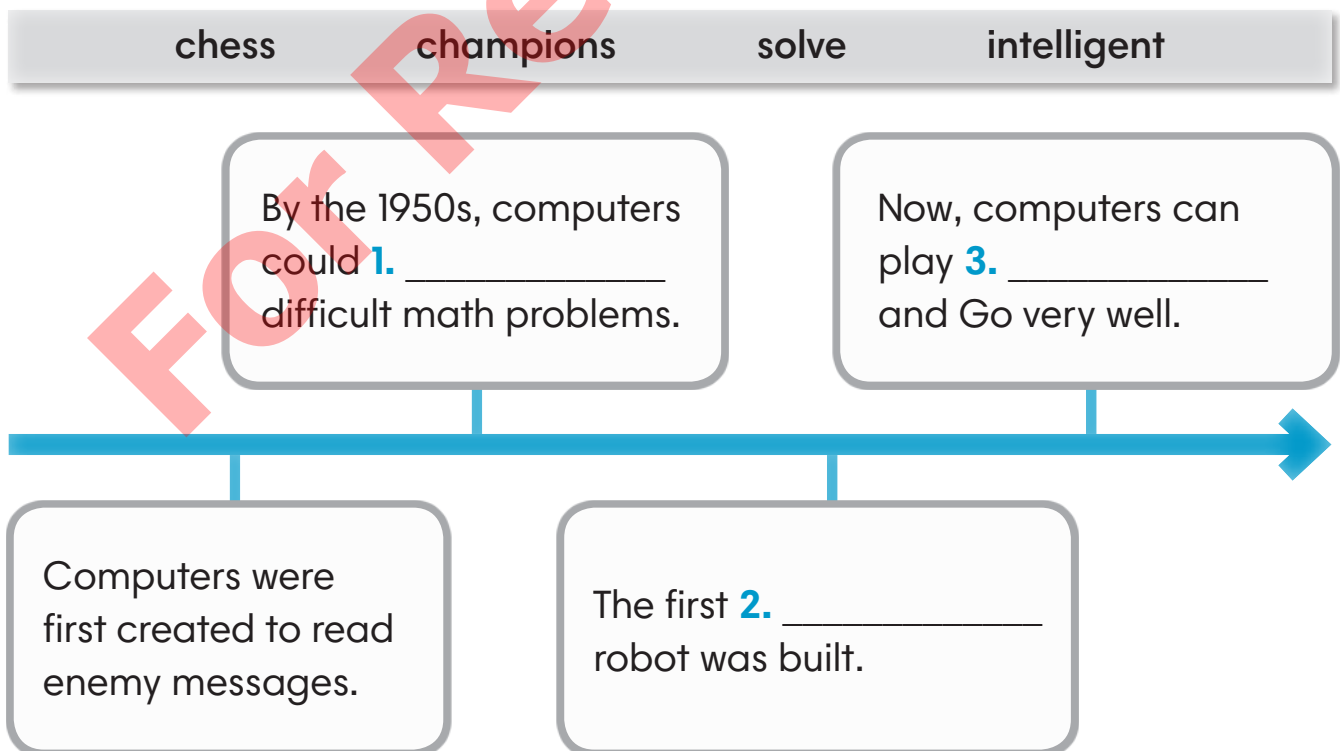
READING COMPREHENSION

Choose the correct answer.

- MAIN IDEA** 1. What is the reading mainly about?
- a. How to make a useful computer
 - b. How computers and robots have developed
 - c. Why computers and robots can be dangerous
- DETAIL** 2. Computers could solve difficult math problems by _____.
- a. the 1950s
 - b. World War II
 - c. the 1970s
- DETAIL** 3. Which is true about modern computers?
- a. They can't solve math problems.
 - b. They can play the game Go.
 - c. They can think like us.

READING SKILLS Sequencing

Complete the chart. One word is extra.



VOCABULARY REVIEW

Circle the correct word.

1. During the war, people used computers to read (intelligent / enemy) messages.
2. Computers could (solve / beat) difficult math problems by the 1950s.
3. The first (enemy / intelligent) robot was built in the 1970s.
4. Now computers can (beat / solve) champion chess and Go players.



CENTURY SKILLS

Critical Thinking

Creativity

Collaboration

Communication

PROJECT A New Kind of Friend

You read about how in the future a robot could be your friend. What would you like your perfect robot friend to be like?

Step 1 Think about these questions about your robot friend.

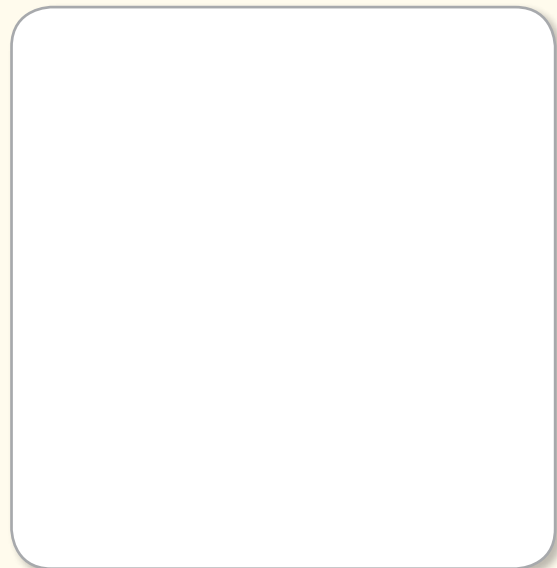
Step 2 Draw a picture of your robot friend.

What is its name?

What do you do together for fun?

What special skills / superpowers does it have?

What does it help you with?



Step 3 Get into a group and show your picture to your group. Decide who has the best robot friend. Why is it the best one?