READING FUTURE DEVELOP 2 Student Book

Unit 1. Cleaning Up Space Garbage

p. 10
Warm-Up
(Answers will vary.)
Since there is no gravity in space, I might be able to lose something easily by mistake.

New Words
1. net 2. spaceship
3. solution 4. powerful
5. waste 6. invent

p. 11
Vocabulary Skills
1. a 2. b

Reading Skills
1. It can hit spaceships and even the Earth.
2. powerful cameras

p. 12
Reading Comprehension
1. b 2. c 3. c

Reading Skills
1. space 2. tonnes 3. catch

p. 13
Vocabulary Review
1. invented 2. spaceships
3. powerful 4. waste

Project
(Answers will vary.)

Unit 2. Robot Firefighters

p. 14
Warm-Up
(Answers will vary.)
I think window cleaning is a dangerous job. I think robots can clean windows because they are never afraid of heights.

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

p. 15
Vocabulary Skills
1. a 2. b

Reading Skills
1. One is small and can fit through doors. Another is much bigger. One firefighting robot even has hands and a face.
2. Firefighters

p. 16
Reading Comprehension
1. b 2. a 3. c

Reading Skills
1. robot 2. firefighters
3. dangerous 4. water

p. 17
Vocabulary Review
1. fires 2. joystick
3. Brave 4. fit

Project
(Answers will vary.)

Unit 3. Cars That Drive Themselves

p. 18
Warm-Up
(*Answers will vary.*)
I might feel nervous because I have never seen a car without a driver before.

New Words
1. prevent 2. trust
3. type 4. crash
5. driver 6. vehicle

p. 19
Vocabulary Skills
1. a 2. c

Reading Skills
1. These cars drive themselves.
2. Some people don't trust a car with no driver. And some people just enjoy driving.

p. 20
Reading Comprehension
1. c 2. c 3. a

Reading Skills
1. themselves 2. prevents 3. trust

p. 21
Vocabulary Review
1. type 2. vehicle
3. prevent 4. crashes

Project
(Answers will vary.)

000 (Turn on engine)
010 (Go forward)
001 (Turn right)
100 (Turn left)
100 (Turn left)
111 (Keep going)
000 (Stop!)
0101 (Turn off engine)
→ Arrived at the brown pin

Unit 4. Intelligent Machines

p. 22
Warm-Up
(*Answers will vary.*)
It seems like an early form of the computer. It seems at least 100 years old. It might be used for calculation.

New Words
1. intelligent 2. solve
3. enemy 4. beat
5. champion 6. chess

p. 23
Vocabulary Skills
1. a 2. b

Reading Skills
1. They could understand enemy messages.
2. think, talk

p. 24
Reading Comprehension
1. b 2. a 3. b

Reading Skills
1. solve 2. intelligent 3. chess

p. 25
Vocabulary Review
1. enemy 2. solve
3. intelligent 4. beat

Project
(Answers will vary.)

Unit 5. Hieroglyphics

p. 28
Warm-Up
(Answers will vary.)
I know two writing systems: English and Korean

New Words
1. text 2. dictionary
3. discover 4. ancient
5. translate 6. expert

p. 29
Vocabulary Skills
1. a 2. c

Reading Skills
1. Hieroglyphics are the writing system of ancient Egypt.
2. the same text written in hieroglyphics and Greek

p. 30
Reading Comprehension
1. c 2. c 3. b

Reading Skills
1. complicated 2. 1799 3. translate

p. 31
Vocabulary Review
1. discover 2. ancient
3. text 4. translate

Project
(Answers will vary.)

Let's play (Apostrophe is not included)

Unit 6. Baseball Signs

p. 32
Warm-Up
(Answers will vary.)
- I think he is the catcher on a baseball team.
- He is trying to deliver a message to a team member.

New Words
1. communicate 2. glove
3. secret 4. notice
5. pitcher 6. sign

p. 33
Vocabulary Skills
1. b 2. a

Reading Skills
1. their hands, glove, head
2. But they need to communicate information about the game.

p. 34
Reading Comprehension
1. c 2. a 3. b

Reading Skills
1. signs 2. communicate 3. glove

p. 35
Vocabulary Review
1. notice 2. communicate
3. secret 4. glove

Project
(Answers will vary.)

Unit 7. How Animals Communicate

p. 36
Warm-Up
(Answers will vary.)
The elephants are holding one another's nose. I think they are fighting.

New Words
1. produce 2. unique
3. path 4. smack
5. distance 6. chemical

p. 37
Vocabulary Skills
1. c 2. a

Reading Skills
1. An ant leaves a chemical path. Bees do a special dance. Elephants use low sounds. Dolphins smack their tail on the water. They produce flashes of light to communicate.
2. firefly, glow-worm

p. 38
Reading Comprehension
1. b 2. a 3. c

Reading Skills
1. language 2. smack 3. light

p. 39
Vocabulary Review
1. unique 2. smack
3. chemical 4. distances

Project
(Answers will vary.)

Unit 8. Barcodes and QR Codes

p. 40
Warm-Up
(Answers will vary.)
I think he is a worker in a shipping company. He is holding a scanner.

New Words
1. ticket 2. luggage
3. scan 4. stripe
5. airline 6. item

p. 41
Vocabulary Skills
1. c 2. b

Reading Skills
1. Supermarkets and shipping companies handle lots of items. They need to scan items quickly.
2. They use dots instead of bars.

p. 42
Reading Comprehension
1. b 2. a 3. b

Reading Skills
1.stripes 2. information
3. scan 4. dots

p. 43
Vocabulary Review
1. luggage 2. tickets
3. scan 4. items

Project
(Answers will vary.)
Step 1
MAKING CODES IS FUN
Step 2
-.. --- / -.-- --- ..- / .-- .- -. - / ... --- -- . / .. -.-. . / -.-. .- . . .- -- ..--..
DO YOU WANT SOME ICE CREAM?

Unit 9. The Theremin

p. 46
Warm-Up
(Answers will vary.)
- I blow into them and push the key.

New Words
1. spooky 2. touch
3. current 4. antenna
5. wooden 6. wave

p. 47
Vocabulary Skills
1. c 2. b

Reading Skills
1. It is just a wooden box with two antennas.
2. You wave your hands in the air near the antennas. Your hands change an electric current.

p. 48
Reading Comprehension
1. b 2. a 3. b

Reading Skills
1. wooden 2. strange
3. antennas 4. current

p. 49
Vocabulary Review
1. antennas 2. touch
3. wave 4. spooky

Project
(Answers will vary.)

Unit 10. Beat Machines

p. 50
Warm-Up
(Answers will vary.)
- I like fast songs. They are exciting.
- Synthesizers are used for making a beat.

New Words
1. cymbal 2. recording
3. drummer 4. perfect
5. variety 6. mistake

p. 51
Vocabulary Skills
1. a 2. c

Reading Skills
1. They play faster and longer. They never get tired. They don't make mistakes. They play a wider variety of sounds.
2. Human drummers make small changes in the beat. These add feeling to the music.

p. 52
Reading Comprehension
1. c 2. b 3. a

Reading Skills
1. recordings 2. cymbals 3. feeling

p. 53
Vocabulary Review
1. variety 2. mistakes
3. perfect 4. recordings

Project
Step 1
1. s 2. e 3. d
4. b 5. c
Step 2
(*Answers will vary.*)

Unit 11. Auto-Tune

p. 54
Warm-Up
(Answers will vary.)
- I like singing, but not in front of other people.
- I know four types of music: Pop, jazz, rock and classical.

New Words
1. engineer 2. tone
3. tune 4. nearly
5. software 6. natural

p. 55
Vocabulary Skills
1. c 2. c

Reading Skills
1. Auto-Tune
2. Now, Auto-Tune is used in almost every song.

p. 56
Reading Comprehension
1. c 2. a 3. b

Reading Skills
1. Engineers 2.perfect 3. Nearly

p. 57
Vocabulary Review
1. tones 2. natural
3. software 4. nearly

Project
Step 1

Step 2
Secret Word: AUTO-TUNE

Unit 12. The Changing Shape of Music

p. 58
Warm-Up
(Answers will vary.)
I listen to music on my phone.

New Words
1. pocket 2. file
3. convenient 4. disk
5. cassette 6. stream

p. 59
Vocabulary Skills
1. c 2. a

Reading Skills
1. Machines played music on tubes or disks.
2. It played music on cassettes.

p. 60
Reading Comprehension
1. b 2. a 3. b

Reading Skills
1. disks 2. cassettes 3. MP3 files

p. 61
Vocabulary Review
1. pocket 2. files
3. cassettes 4. stream

Project
Step 1

6.disk	5.pocket	4.convenient
3.cassettes	1. file	2.stream

Step 2

Unit 13. The First Scale

p. 64
Warm-Up
(Answers will vary.)
The first weighing system compared the weights of objects on two plates hung on either side of a bar.

New Words

1. value	2. weigh
3. trade	4. worth
5. equal	6. merchant

p. 65
Vocabulary Skills
1. b 2. c

Reading Skills
1. Merchants weighed these goods.
2. stones

p. 66
Reading Comprehension
1. b 2. a 3. c

Reading Skills

1. trade	2. weigh
3. goods	4. worth

p. 67
Vocabulary Review

1. Trade	2. weigh
3. value	4. merchants

Project
(*Answers will vary.*)

Unit 14. Weighing a Planet

p. 68
Warm-Up
(*Answers will vary.*)
- I would weigh them using a huge scale.
- They might measure the gravity and put the result in a formula.

New Words
1. gravity 2. scientist
3. weight 4. moon
5. orbit 6. planet

p. 69
Vocabulary Skills
1. c 2. b

Reading Skills
1. a planet's moons.
2. They need to know the distance between the planet and the moon. And they also need to know how long it takes the object to orbit the planet once.

p. 70
Reading Comprehension
1. a 2. c 3. a

Reading Skills
1. moon 2.orbit 3.planet

p. 71
Vocabulary Review
1. weight 2. planet
3. Scientists 4. weight

Project
(*Answers will vary.*)

Unit 15. Catching Rain

p. 72
Warm-Up
(Answers will vary.)
I think scientists use a rain gauge for catching and measuring rain.

New Words
1. measure 2. flood
3. speed 4. defend
5. times 6. drop

p. 73
Vocabulary Skills
1. b 2. c

Reading Skills
1. Floods can wipe out whole villages.
2. disdrometer

p. 74
Reading Comprehension
1. a 2. c 3. b

Reading Skills
1. flood 2. measures
3. speed 4. drop
5. times

p. 75
Vocabulary Review
1. speed 2. times
3. defend 4. measure

Project
(*Answers will vary.*)

Unit 16. Weather Models

p. 76
Warm-Up
(*Answers will vary.*)
- Yes, I pay attention to the weather a lot. By doing so, I can dress properly every day.
- I think I can by paying attention to animals' behavior.

New Words

1. complicated	2. forecast
3. information	4. moisture
5. predict	6. model

p. 77
Vocabulary Skills
1. b 2. b

Reading Skills
1. It's the job of weather scientists to predict the weather.
2. changes in temperature and moisture

p. 78
Reading Comprehension
1. b 2. b 3. a

Reading Skills
1. predict 2. information 3. complicated

p. 79
Vocabulary Review

1. predict	2. moisture
3. models	4. forecast

Project
(Answers will vary.)

READING FUTURE DEVELOP 2
Workbook

Unit 1. Cleaning Up Space Garbage

p. 4
Vocabulary Check
Across
3. powerful
5. invent
Down
1. solution
2. spaceship
4. waste
6. net

Secret Word: STARS

Sentence Check
1. People have left 8,000 tonnes of trash in space.
2. It can hit spaceships and even Earth.
3. Scientists will use powerful cameras.

p. 5
Comprehension Check
A.
1.Top: Scientist have invented a giant net.
2.Top: Space debris can hit spaceships.
3.Bottom: The net gives scientists a solution.

B.
1. F 2. T 3. T

Summary
1. Waste 2. tonnes
3. spaceships 4. invented
5. net 6. powerful

Unit 2. Robot Firefighters

p. 6
Vocabulary Check
Across
3. battle
4. fit
5. brave
Down
1. joystick
2. meters
4. fires

Secret Word: TALK

Sentence Check
1. Fighting fires is a dangerous and dirty job.
2. In the future, we'll have robots to protect us.
3. One robot walks and carries a hose.

p. 7
Comprehension Check
A.
1. Top: One robot can carry a hose.
2. Bottom: One robot looks like a person.
3. Bottom: Firefighters have a dangerous job.

B.
1. F 2. F 3. T

Summary
1. Brave 2. dirty
3. protect 4. meters
5. hands 6. helpers

Unit 3. Cars That Drive Themselves

p. 8
Vocabulary Check
Across
4. prevent
5. vehicle
6. crash
Down
1. trust
2. type
3. driver

Secret word: CARS

Sentence Check
1. In some ways, these cars will be great.
2. It senses other cars and keeps a safe distance.
3. Some people just enjoy driving.

p. 9
Comprehension Check
A.
1. Bottom: This new type of vehicle drives itself.
2. Top: A computer in the car watches the road.
3. Bottom: These new cars can prevent crashes.

B.
1. T 2. F 3. F

Summary
1. type 2. relax
3. prevents 4. crashes
5. trust 6. enjoy

Unit 4. Intelligent Machines

p. 10
Vocabulary Check
Across
1. champions
3. beat
4. solve
5. enemy
Down
1. chess
2. intelligent

Secret word: TEAM

Sentence Check
1. The first computers were created in the Second World War.
2. Many people think computers will soon be more like us.
3. They may think and talk soon.

p. 11
Comprehension Check
A.
1. Top: Computers can solve difficult math problems.
2. Bottom: Computers can play games like chess.
3. Top: Computers can beat humans at chess and Go.

B.
1. F 2. F 3. T

Summary
1. messages 2. solve
3. robot 4. chess
5. champions 6. think

Unit 5. Hieroglyphics

p. 12
Vocabulary Check
Across
2. discovered
3. ancient
Down
1. translate
2. dictionary
4. experts
5. text

Secret Word: STONE

Sentence Check
1. Hieroglyphics are the writing system of ancient Egypt.
2. For a long time, no one could read hieroglyphics.
3. This stone had the same text written in hieroglyphics and Greek.

p. 13
Comprehension Check
A.
1. Bottom: Hieroglyphics are written in different directions.
2. Bottom: The Rosetta Stone was discovered 200 years ago.
3. Top: Hieroglyphics are made up of pictures.

B.
1. F 2. F 3. F

Summary
1. system 2. ancient
3. discovered 4. Stone
5. Experts 6. translate

Unit 6. Baseball Signs

p. 14
Vocabulary Check
Across
4. glove
5. notice
6. pitcher
Down
1. sign
2. communicate
3. secret

Secret Word: MESSAGE

Sentence Check
1. Baseball players can't shout to each other.
2. The players use a variety of hand signs.
3. The pitcher and other players stand far apart.

p. 15
Comprehension Check
A.
1. Top: Baseball players make signs with their hands.
2. Bottom: The signs are secret to each team.
3. Bottom: A team often changes their hand signs.

B.
1. F 2. T 3. T

Summary
1. hands 2. communicate
3. secret 4. variety
5. fingers 6. signs

Unit 7. How Animals Communicate

p. 16
Vocabulary Check
Across
5. distance
6. smack
Down
1. produce
2. path
3. chemical
4. unique

Secret word: LISTEN

Sentence Check
1. Other ants follow it to the food.
2. Dolphins smack their tail on the water.
3. Animals like the firefly and the glow-worm have another way.

p. 17
Comprehension Check
A.
1. Top: Animals communicate in different ways.
2. Bottom: A dolphin smacks the water to warn other dolphins.
3. Top: A glow-worm produces light to communicate.

B.
1. T 2. T 3. F

Summary
1. Animals 2. path
3. flowers 4. distances
5. smack 6. produce

Unit 8. Barcodes and QR Codes

p. 18
Vocabulary Check
Across
3. stripes
5. luggage
6. scan
Down
1. ticket
2. airlines
4. items

Secret Word: LINES

Sentence Check
1. A machine reads the stripes as numbers.
2. Barcodes are useful for supermarkets and shipping companies.
3. You can scan a QR code with your phone.

p. 19
Comprehension Check
A.
1. Bottom: Barcodes use stripes.
2. Bottom: Airlines handle lots of luggage.
3.Top: Supermarket items have barcodes.

B.
1. F 2. T 3. F

Summary
1. Airlines 2. tickets
3. stripes 4. scan
5. items 6. information

Unit 9. The Theremin

p. 20
Vocabulary Check
Across
2. spooky
4. current
5. wave
6. wooden
Down
1. touch
3. antenna

Secret Word: stand

Sentence Check
1. It doesn't look like other musical instruments.
2. The theremin's strange sound isn't for everyone.
3. The way you play the Theremin is also strange.

p. 21
Comprehension Check
A.
1. Top: The Theremin has two antennas.
2. Bottom: Your hands change the current.
3. Bottom: You play the theremin by waving your hands in the air.

B.
1. T 2. F 3. T

Summary
1. electronic 2. pianos
3. boxes 4. current
5. change 6. old

Unit 10. Beat Machines

p. 22
Vocabulary Check
Across
1. variety
3. cymbals
5. drummer
Down
2. recordings
4. perfect
6. mistake

Secret Word: BEAT

Sentence Check
1. They play a wider variety of sounds.
2. Human drummers make small changes in the beat.
3. To some people, human drummers are always better.

p. 23
Comprehension Check
A.
1. Bottom: Drum machines play a variety of sounds.
2. Bottom: Human drummers add feeling to the music.
3. Top: Drum machines contain recordings.s

B.
1. T 2. F 3. T

Summary
1. cymbals 2. recordings
3. variety 4. mistakes
5. drummers 6. perfect

Unit 11. Auto-Tune

p. 24
Vocabulary Check
Across
2. tune
4. nearly
5. software
Down
1. engineers
2. tone
3. natural

Secret Word: SINGER

Sentence Check
1. Then, the software could make it perfect.
2. The song still sounded natural.
3. The singer sounded like a robot.

p. 25
Comprehension Check
A.
1. Bottom: Auto-Tune is a kind of software.
2. Top: Engineers use Auto-Tune to make singing perfect.
3. Top: Auto-Tune can make a singer sound like a robot.

B.
1. F 2. T 3. F

Summary
1. Engineers 2. software
3. natural 4. creative
5. tones 6. nearly

Unit 12. The Changing Shape of Music

p. 26
Vocabulary Check
Across
3. cassettes
6. files
Down
1. convenient
2. pocket
4. stream
5. disks

Secret Word: LISTEN

Sentence Check
1. But these machines were too heavy to take around.
2. Now, listening to music is convenient.
3. With Sony Walkman, people could take music everywhere.

p. 27
Comprehension Check
A.
1. Bottom: Listening to music is convenient today.
2. Bottom: You can listen to MP3 files on your phone and computer.
3. Top: The Walkman could fit in your pocket.

B.
1. F 2. F 3. T

Summary
1. disks 2. convenient
3. cassettes 4. stream
5. files 6. pocket

Unit 13. The First Scale

p. 28
Vocabulary Check
Across
1. trade
3. worth
4. value
5. merchants
Down
2. equal
3. weighed

Secret Word: HARD

Sentence Check
1. It was hard to count some goods.
2. The first weighing system was simple.
3. All merchants used stones of the same size and weight.

p. 29
Comprehension Check
A.
1. Top: The first weighing system was used to weigh spices.
2. Bottom: The first weighing system was simple.
3. Bottom: Stones were used to find the value of goods.

B.
1. F 2. F 3. T

Summary
1. trade 2. value
3. merchant 4. weighing
5. equal 6. worth

Unit 14. Weighing a Planet

p. 30
Vocabulary Check
Across
3. gravity
5. weight
6. planet
Down
1. scientist
2. orbit
4. moon

Secret Word: HEAVY

Sentence Check
1. Scientists need to know two things.
2. A heavy planet pulls harder on its moons.
3. Scientists look at a planet's moons.

p. 31
Comprehension Check
A.
1. Top: You can find a planet’s weight by studying its moons.
2. Top: You measure the time a moon takes to orbit the planet.
3. Bottom: A heavy planet pulls harder on its moons.

B.
1. F 2. T 3. F

Summary
1. weight 2. scientists
3. moon 4. orbit
5. gravity 6. planet

Unit 15. Catching Rain

p. 32
Vocabulary Check
Across
5. measure
6. flood
Down
1. times
2. speed
3. drop
4. defend

Secret Word: FOOD

Sentence Check
1. Rain can be dangerous.
2. Scientists have good tools to study rain.
3. A disdrometer tells scientists how fast rain is falling.

p. 33
Comprehension Check
A.
1. Top: Rain can cause floods.
2. Top: A disdrometer uses light.
3. Bottom: A disdrometer measures the speed of rain.

B.
1. F 2. T 3. F

Summary
1. flood 2. speed
3. drop 4. times
5. measuring 6. defend

Unit 16. Weather Models

p. 34
Vocabulary Check
Across
2. models
5. predict
6. information
Down
1. complicated
3. moisture
4. forecast

Secret Word: STORM

Sentence Check
1. Weather scientists watch how the air moves.
2. Weather scientists can't always get good information.
3. Weather models are getting better all the time.

p. 35
Comprehension Check
A.
1. Bottom: People need to know when a big storm is coming.
2. Top: Weather scientists watch changes in temperature.
3. Bottom: Supercomputers run complicated weather models.

B.
1. T 2. F 3. T

Summary
1. predict 2. information
3. moisture 4. complicated
5. models 6. forecasts